Ackerman, Joyce

From: Jackie Rowley <JRowley@Geosyntec.com>
Sent: Monday, April 9, 2018 11:49 AM
To: Ackerman, Joyce
Cc: Dave Folkes; Jonathan H. Steeler
Subject: FW: Budget
Attachments: Master Stockpile and Test-Pits Cost Estimates For Discussion.xlsx; Excavations and Stockpiles_Showing areas to be excavated.pdf; Phase 1_Test Pit Locations and PID Results with corresponding samples.pdf

Hello Joyce,

Please see the attached table and map displaying the zones which I anticipate you wanting to be excavated based on our previous PID results (Phase 1 figure attached), and sample results. In the table there are specific details regarding these zones. Are you available later today for a call to discuss this?

Cheers,

Jackie Rowley
Geologist

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TEST-PIT COST ESTIMATIONS

PHASE 1 TEST PIT ESTIMATES

Sample Location	Sample Description	Matix	Source	Corresponding Sample Number	Corresponding TA report number	EPA 8260C - VOC's	EPA 8260C- TCLP	EPA 8270D - SVOC's	EPA 8270D - TCLP	8270D LL SVOC's	EPA- 7471B- Mercury	EPA 6010C - Metals	EPA 6010C - TCLP	7470A - Mercury	7471B- Mercury	Exceedances Based on the 20x Rule And Other Notes (Result:Limit)	Amount of Waste Associated	Potential Sampling Costs	PID Rental Costs	Costs for Disposal Including Transportation	Costs for Excavation
TEST-PIT	Composite from A, B & C	SOIL	PHASE 1	NLF-SS-PHASE1-COMP6-011718	J74221	X		X		X	X	X			X	Does not exceed.	PHASE 1 - EXCAVATION ZONE 1 Passed TCLP, so should be accepted by Front Range. Will likely need to excavate an area 7' in depth, 50' in length, and 25' in width = 8750 cubic feet, or 324 cubic yards (Using 350 cubic yards to estimate), or **525 tons**. (using 1:1.5 conversion rate). Will use PID monitors to check bucket every 2' in depth. Soils that read less than 100ppm will be stockpiled in a "clean" pile to be placed back in the pit, and soils which read over 100ppm will be stockpiled in a "dirty" pile to be sampled later. "Dirty" stockpiles will need to be segregated into small piles in order to more easily differentiate between contaminated piles.	Dirty stockpiles will be sampled for VOC Totals ($70) and TCLP ($110), and SVOC Totals ($165) = ($345 per sample). 1 sample will be collected every 50 cu. Yds as outlined in DRWP = 7 samples.		Cost represents maximum costs, (i.e. if all waste excavated had to go to Front Range, hopefully this number will be lower once soils are field screened)	
TEST-PIT	Resampled composite stockpile of A, B & C	SOIL	PHASE 1	NLF-SS-PHASE1-COMP10-012518	J74468		X		X	X			X	X		Passed TCLP					
TEST-PIT	Resampled Test-Pit A for discrete sample	SOIL	PHASE 1	NLF-SS-PHASE1-TPP-012318	J74373	X				X	X	X			X	1,1-Dichloroethene (17:14), Carbon tetrachloride (20:10), Vinyl Chloride (22:4)					
TEST-PIT	Discrete sample from Test Pit S 2 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NE02-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (18:14), Carbon tetrachloride (21:10), Vinyl Chloride (23:4)					
TEST-PIT	Discrete sample from Test Pit S 5 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NE05-030618	J75616	X		X			X	X			X	Does not exceed.					
TEST-PIT	Discrete sample from Test Pit S 7 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NE07-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (100:14), 1,2-Dichloroethane (52:10), Carbon tetrachloride (120:10), Tetrachloroethene (71:14), Vinyl Chloride (130:4)					
TEST-PIT	Discrete sample from Test Pit S 8.5 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NE8.5-030618	J75616	X		X			X	X			X	Does not exceed.		$2,415.00		$21,000.00	
TEST-PIT	Composite from stockpile of Test-Pits J, G & N	SOIL	PHASE 1	NLF-SS-PHASE1-COMP7-011718	J74373	X	X	X		X	X	X	X	X	X	Vinyl Chloride (5.2:4), Failed TCLP with low numbers.	PHASE 1 - EXCAVATION ZONE 2 Should be accepted by Front Range, but will need to verify they would accept the failed TCLP with low results. May need to excavate an area 12' in depth, 60' in length, and 50' in width = 36,000 cubic feet, or 1333 cubic yards (Using 1350 cubic yards for estimation), or **2025 tons**. (using 1:1.5 conversion rate). Will use PID monitors to check bucket every 2' in depth. Soil over 100ppm is to be placed in stockpiles to be sampled later, soil below 100ppm is to be used to backfill the pit.	Dirty stockpiles will be sampled for VOC Totals ($70) and TCLP ($110), and SVOC Totals ($165) = ($345 per sample). 1 sample will be collected every 50 cu. Yds as outlined in DRWP = 27 samples.		Cost represents maximum costs, (i.e. if all waste excavated had to go to Front Range, hopefully this number will be lower once soils are field screened)	
TEST-PIT	Discrete sample from Test Pit Q 2 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW02-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (87:14), 1,2-Dichloroethane (44:10), Carbon tetrachloride (100:10), Tetrachloroethene (61:14), Vinyl Chloride (110:4)					
TEST-PIT	Discrete sample from Test Pit Q 4 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW04-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (130:14), 1,2-Dichloroethane (66:10), Carbon tetrachloride (150:10), Tetrachloroethene (92:14), Vinyl Chloride (170:4)					
TEST-PIT	Discrete sample from Test Pit Q 6 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW06-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (91:14), 1,2-Dichloroethane (46:10), Carbon tetrachloride (110:10), Tetrachloroethene (64:14), Vinyl Chloride (120:4)					
TEST-PIT	Discrete sample from Test Pit Q 8 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW08-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (85:14), 1,2-Dichloroethane (44:10), Carbon tetrachloride (99:10), Tetrachloroethene (60:14), Vinyl Chloride (110:4)					
TEST-PIT	Discrete sample from Test Pit Q 10 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW10-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (17:14), Carbon tetrachloride (19:10), Vinyl Chloride (21:4)					
TEST-PIT	Discrete sample from Test Pit Q 10.5 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW10.5-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (180:14), 1,2-Dichloroethane (89:10), Carbon tetrachloride (200:10), Chloroform (130:120), Tetrachloroethene (120:14), Vinyl Chloride (230:4)					
TEST-PIT	Discrete sample from Test Pit Q 13 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-NW13-030618	J75616	X		X			X	X			X	Vinyl Chloride (11:4)					
TEST-PIT	Discrete sample from Test Pit R 2 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SE02-030618	J75616	X		X			X	X			X	Does not exceed.					
TEST-PIT	Discrete sample from Test Pit R 5 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SE05-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (88:14), 1,2-Dichloroethane (45:10), Carbon tetrachloride (100:10), Tetrachloroethene (62:14), Vinyl Chloride (110:4)					
TEST-PIT	Discrete sample from Test Pit R 6.5 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SE6.5-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (88:14), 1,2-Dichloroethane (45:10), Carbon tetrachloride (100:10), Tetrachloroethene (62:14), Vinyl Chloride (110:4)					

TEST-PIT	Discrete sample from Test Pit R 8.5 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SE8.5-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (43:14), 1,2-Dichloroethane (22:10), Carbon tetrachloride (50:10), Tetrachloroethene (30:14), Vinyl Chloride (55:4)		$9,315.00		$81,000.00	
TEST-PIT	Discrete sample from Test Pit P 2 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SW02-030618	J75616	X		X			X	X			X	Doess not exceed.	PHASE 1 - EXCAVATION ZONE 3 Very low numbers. May need to excavate an area 2' in depth (top 2' of soil read below 100ppm in the field), 15 feet in length, and 12' in width = 360 cubic feet, or 13 cubic yards (using 15 cubic yards for estimation), or **22.5 tons**. (using 1:1.5 conversion rate) Will use PID monitors to check bucket every 2' in depth. Soil over 100ppm is to be placed in stockpiles to be sampled later, soil **below 100ppm is to be used to backfill the pit.**	Dirty stockpiles will be sampled for VOC Totals ($70) and TCLP ($110), and SVOC Totals ($165) = ($345 per sample). 1 sample will be collected every 50 cu. Yds as outlined in DRWP = 7 samples.	PID costs to rent per week = $386. Using 2 week rental period.		Assuing that this is only for excavation no backfill and an approximate 1 1/2 week duration to complete the excavations with limited slow downs for sampling the estimated costs for excavating these areas is noted below and includes a loader, excavator, water truck, operators, field tech, PM, Gear trucks, air monitoring both active in the field and Suma canisters, subistence, Travel and CABI. No overtime is included. Estimate includes 15% contingency.
TEST-PIT	Discrete sample from Test Pit P 4 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SW04-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (42:14), 1,2-Dichloroethane (22:10), Carbon tetrachloride (49:10), Tetrachloroethene (30:14), Vinyl Chloride (55:4)					
TEST-PIT	Discrete sample from Test Pit P 6 feet below pit floor.	SOIL	PHASE 1	NLF-SS-PHASE1-SW06-030618	J75616	X		X			X	X			X	1,1-Dichloroethene (17:14), Carbon tetrachloride (20:10), Vinyl Chloride (22:4)		$2,415.00	$772.00	$900.00	$72,000
																	PHASE 1 TOTAL COSTS SPECIFIC	**$14,145.00**	$772.00	$102,900.00	**$72,000.00**
																				PHASE 1 TOTAL COSTS ALL INCLUSIVE	**$189,817.00**
PHASE 2A TEST PIT ESTIMATIONS																					
TEST-PIT	Discrete Sample from Test pit in east half of Phase 2A - 2 feet below the pit floor.			NLF-SS-PHASE2AE02-021718	J75089	X				X						Does not exceed.					
TEST-PIT	Discrete Sample from Test pit in east half of Phase 2A - 4 feet below the pit floor.			NLF-SS-PHASE2AE04-021718	J75089	X				X						Does not exceed.					
TEST-PIT	Discrete Sample from Test pit in east half of Phase 2A - 6 feet below the pit floor.			NLF-SS-PHASE2AE06-021718	J75089	X				X						Does not exceed.	No excavations need to take place in this half due to low levels.				
TEST-PIT	Discrete Sample from Test pit in east half of Phase 2A - 8 feet below the pit floor.			NLF-SS-PHASE2AE08-021718	J75089	X				X						Does not exceed.					
TEST-PIT	Discrete Sample from Test pit in east half of Phase 2A - 10 feet below the pit floor.			NLF-SS-PHASE2AE10-021718	J75089	X				X	X	X			X	Does not exceed.					
TEST-PIT	Discrete Sample from Test pit in east half of Phase 2A - 12 feet below the pit floor.			NLF-SS-PHASE2AE12-021718	J75089	X				X						Does not exceed.				$0.00	
TEST-PIT	Discrete Sample from Test **pit in west half of Phase 2A** - 2 feet below the pit floor.			NLF-SS-PHASE2AW02-021718	J75089	X				X						1,1-Dichloroethene (16:14), Carbon tetrachloride (19:10), Vinyl Chloride (21:4)	PHASE 2A - EXCAVATION ZONE 1 Due to results of Totals being elevated, may need to excavate an area up to 10' in depth, 18' in length, 7' in width = 1260 cubic feet, or 46 cubic yards (using 50 cubic yards for estimation), or **75 tons**. (using 1:1.5 conversion rate cubic yards to tons). Will use PID monitors to check bucket every 2' in depth. Soil over 100ppm is to be	Dirty stockpiles will be sampled for VOC Totals ($70) and TCLP ($110), and SVOC			Assuming excavation can be completed in 3 days, that this is only for excavation and stockpiling no backfill and an approximate 1 week duration to complete the excavations with limited slow downs for sampling the estiamted costs
TEST-PIT	Discrete Sample from Test **pit in west half of Phase 2A** - 4 feet below the pit floor.			NLF-SS-PHASE2AW04-021718	J75089	X				X						Vinyl Chloride (4.2:4)				Cost represents maximum costs,	

TEST-PIT	Discrete Sample from Test pit in west half of Phase 2A - 6 feet below the pit floor.			NLF-SS-PHASE2AW06-021718	J75089	X				X	X	X			X	Vinyl Chloride (4.2:4)	placed in stockpiles to be sampled later, soil **below 100ppm is to be used to backfill the pit.**	Totals ($165) = ($345 per sample). 1 sample will be collected every 50 cu. Yds as outlined in DRWP = 1 samples.	PID costs to rent per week = $386. Using 2 week rental period.	(i.e. if all waste excavated had to go to Front Range, hopefully this number will be lower once soils are field screened)	for excavating these areas is noted below and includes a loader, excavator, water truck, operators, field tech, PM, Gear trucks, air monitoring both active in the field and Suma canisters, subsistence and **CABI. No overtime is included.**
TEST-PIT	Discrete Sample from Test pit in west half of Phase 2A - 8 feet below the pit floor.			NLF-SS-PHASE2AW08-021718	J75089	X				X						Does not exceed.					
TEST-PIT	Discrete Sample from Test pit in west half of Phase 2A - 10 feet below the pit floor.			NLF-SS-PHASE2AW10-021718	J75089	X				X						Does not exceed.		$345.00	$772.00	$3,000.00	43,000
																	PHASE 2A TOTAL COSTS SPECIFIC	$345.00	$772.00	$3,000.00	$43,000
																				PHASE 2A COSTS ALL INCLUSIVE	$47,117
																	TOTAL ANTICIPATED COSTS FOR TEST-PITS SPECIFIC	$14,490.00	$1,544.00	$105,900.00	$119,117
																				TOTAL ANTICIPATED COSTS FOR TEST-PITS ALL INCLUSIVE	$308,934

STOCKPILE COST ESTIMATIONS

STOCKPILE	PHASE1-SP1 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-COMP5-011218	J74189	X		X		X	X	X			X	Does not exceed.	1284 cubic yards; **1926 tons** (using 1:1.5 conversion rate). This pile is to be resegregated in the field. Soil less than 100ppm is to be used to backfill the pits, and soil above 100ppm is to be stockpiled and resampled. Currently only 1/5 of this will likely need to be sampled or disposed of, but costs are based on a worst-case total disposal scenario.	Dirty stockpiles will be sampled for VOC Totals ($70) and TCLP ($110), and SVOC Totals ($165) = ($345 per sample). 1 sample will be collected every 50 cu. Yds as outlined in DRWP = 25 samples. Will hopefully reduce to 1/5 of this.	Backfilling and resegregating will require the use of a PID Monitor. Assuming 1 additional week of operations.	$78,773.40	
STOCKPILE	PHASE1-SP1 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP101-030718	J75616	X		X			X	X			X	Does not exceed.					
STOCKPILE	PHASE1-SP1 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP102-030718	J75616	X		X			X	X			X	Chromium (120:100)					
STOCKPILE	PHASE1-SP1 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP103-030718	J75616	X		X			X	X			X	1,1-Dichloroethene (32:14), 1,2-Dichloroethane (16:10), Carbon tetrachloride (38:10), Tetrachloroethene (23:14), Vinyl Chloride (42:4)					
STOCKPILE	PHASE1-SP1 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP104-030718	J75616	X		X			X	X			X	Does not exceed.					
STOCKPILE	PHASE1-SP1 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP105-030718	J75616	X		X			X	X			X	Does not exceed.		$8,625.00	$386.00		
STOCKPILE	PHASE1-SP2 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP201-030718	J75616	X		X			X	X			X	1,1-Dichloroethene (42:14), 1,2-Dichloroethane (21:10), Carbon tetrachloride (49:10), Tetrachloroethene (29:14), Vinyl Chloride (54:4)	51 cubic yards; **76.5 tons** (using 1:1.5 conversion rate)	N/A	N/A	$3,128.85	
STOCKPILE	PHASE1-SP3 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-COMP4-011118	J74189	X		X		X	X	X	X	X	X	Chromium (420:100), 1,1-Dichloroethene (43:14), 1,2-Dichloroethane (22:10), Carbon tetrachloride (50:10), Tetrachloroethane (30:14), Vinyl Chloride (55:4) Passed TCLP	91 cubic yards; **136.5 tons** (using 1:1.5 conversion rate)	N/A	N/A	$0.00	
STOCKPILE	PHASE1-SP3 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-COMP8-012518	J74468		X		X	X			X	X		Passed TCLP					
STOCKPILE	PHASE1-SP3 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP301-030718	J75616	X	X	X			X	X	X	X	X	Chromium (250:100), Passed TCLP					
STOCKPILE	PHASE1-SP3 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP302-030718	J75616	X	X	X			X	X	X	X	X	Passed TCLP					
STOCKPILE	PHASE1-SP4 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-COMP1-011118	J74189	X		X		X	X		X	X		Passed TCLP	37 cubic yards; **55.5 tons** (using 1:1.5 conversion rate)	N/A	N/A	$2,269.95	
STOCKPILE	PHASE1-SP4 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-COMP9-012518	J74468		X		X	X			X	X		Does not exceed.					
STOCKPILE	PHASE1-SP4 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP401-030718	J75616	X	X	X	X		X	X	X	X	X	1,1-Dichloroethene (16:14), Carbon tetrachloride (19:10), Vinyl Chloride (21:4) Passed TCLP					
STOCKPILE	PHASE1-SP5 Stockpile	SOIL	PHASE 1	NLF-SS-PHASE1-SP501-030718	J75616	X	X	X	X		X	X	X	X	X	Passed TCLP	17 cubic yards; **25.5 tons** (using 1:1.5 conversion rate)	N/A	N/A	$0.00	
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP101-031918	J75952	X	X		X							1,1-Dichloroethene (180:14), 1,2-Dichloroethane (89:10), Carbon tetrachloride (200:10), Chloroform (130:120), Tetrachloroethane (120:14), Vinyl Chloride (230:4) Passed TCLP					

STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP102-031918	J75952	X	X		X							1,1-Dichloroethene (93:14), 1,2-Dichloroethane (48:10), Carbon tetrachloride (110:10), Tetrachloroethane (66:14), Vinyl Chloride (120:4) Passed TCLP	1054 cubic yards; **1581 tons** (using 1:1.5 conversion rate)	This pile has already been sampled and does not require further sampling. Currently the samples that represent the outer layer of the pile are "clean", and the samples which represent the center conditions of the pile are dirty. However, EPA would like this entire pile to be taken off site for disposal.	N/A	$64,662.90	Assumes that all soils are being loaded for transport offsite. Estimated time is 3 weeks. Costs are based on assumption that soil can be accepted and taken to Front Range, in the unpredicted event that soils will not be accepted into Front Range, this cost may increase. This includes a loader, dozer, water truck, operators, field tech, PM, Gear trucks, air monitoring both active in the field and Suma canisters, subsistence and CABI. No overtime is included. Estimate includes 15% contingency. Operation costs for backfilling soil is $40,000 additional.
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP103-031918	J75952	X	X		X							1,1-Dichloroethene (170:14), 1,2-Dichloroethane (85:10), Carbon tetrachloride (190:10), Tetrachloroethane (120:14), Vinyl Chloride (220:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP104-031918	J75952	X	X		X							1,1-Dichloroethene (140:14), 1,2-Dichloroethane (70:10), Carbon tetrachloride (160:10), Tetrachloroethane (96:14), Vinyl Chloride (180:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP105-031918	J75952	X	X		X							1,1-Dichloroethene (100:14), 1,2-Dichloroethane (51:10), Carbon tetrachloride (120:10), Tetrachloroethane (70:14), Vinyl Chloride (130:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP106-031918	J75952	X	X		X							Does not exceed. Passed TCLP.					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP107A-031918	J75952	X	X		X							1,1-Dichloroethene (17:14), 1,2-Dichloroethane (20:10), Vinyl Chloride (22:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP108-031918	J75952	X	X		X							1,1-Dichloroethene (34:14), 1,2-Dichloroethane (17:10), Carbon tetrachloride (39:10), Tetrachloroethane (24:14), Vinyl Chloride (44:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP109-031918	J75952	X	X		X							1,1-Dichloroethene (17:14), Carbon tetrachloride (20:10), Vinyl Chloride (22:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP107A-031918	J75952	X	X		X							1,1-Dichloroethene (180:14), 1,2-Dichloroethane (89:10), Carbon tetrachloride (200:10), Tetrachloroethane (:0.7), Vinyl Chloride (21:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP110-031918	J75952	X	X		X							1,1-Dichloroethene (43:14), 1,2-Dichloroethane (22:10), Carbon tetrachloride (50:10), Tetrachloroethane (30:14)), Vinyl Chloride (55:4) Passed TCLP					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP111-031918	J75952	X	X		X							Does not exceed. Passed TCLP.					
STOCKPILE	PHASE 2B-SP1	SOIL	PHASE 2B	NLF-SS-PHASE2B-SP112-031918	J75952	X	X		X							Does not exceed. Passed TCLP.					
STOCKPILE	PHASE3-SP1	SOIL	PHASE 2B	NLF-SS-PHASE3-ROLLOFF-021718	J75049	X			X		X	X				Does not exceed, and has low results.	41 cubic yards, **61.5 tons** (using 1:1.5 conversion rate). If stockpile is confirmed to be Phase 3 waste, no sample will be required, and this can be used as backfill.	$345.00		$2,515.35	
																	TOTAL ANTICIPATED COSTS FOR STOCKPILES SPECIFIC	$8,970.00	$386.00	$151,350.45	$148,000
																	TOTAL ANTICIPATED COSTS FOR STOCKPILES ALL INCLUSIVE				$308,706
																	TOTAL ANTICIPATED COSTS FOR STOCKPILES AND TEST-PITS SPECIFIC	**$23,460.00**	**$1,930.00**	**$257,250.45**	**$267,117**
																	TOTAL ANTICIPATED COSTS FOR STOCKPILES AND TEST-PITS ALL INCLUSIVE				**$617,640**

Legend

- Test Pit
- Excavation
- Stockpile
- Excavation Zone

0 50 100
Feet

N

Stockpile	Estimated cubic yards of soil
CLEAN-SP-01	22.82
CLEAN-SP-02	205.73
CLEAN-SP-03	239.02
CLEAN-SP-04	369.20
CLEAN-SP-05	328.12
CLEAN-SP-06	187.97
PHASE1-SP-1	1284.73
PHASE1-SP-2	51.20
PHASE1-SP-3	91.14
PHASE1-SP-4	37.13
PHASE1-SP-5	16.91
PHASE2B-SP1	1054.64
PHASE3-SP1	41.07

Phase 1-SP2 Stockpile
612 sq. ft.

Clean SP-01 Stockpile
341 sq. ft.

Phase 1-SP1 Stockpile
6,925 sq. ft.

Clean SP-02 Stockpile
1,396 sq. ft.

Phase 1, Excavation Zone 2

Phase 1, Excavation Zone 3

Phase 1, Excavation Zone 1

Phase 1 Excavation
12,990 sq. ft.

Clean SP-03 Stockpile
2,307 sq. ft.

Clean SP-04 Stockpile
2,559 sq. ft.

Phase 1-SP5 Stockpile
330 sq. ft.

Phase 1-SP4 Stockpile
582 sq. ft.

Phase 1-SP3 Stockpile
1,123 sq. ft.

Clean SP-05 Stockpile
2,419 sq. ft.

Phase 2B-SP1 Stockpile
6,024 sq. ft.

Clean SP-06 Stockpile
1,476 sq. ft.

Phase 3-SP1 Stockpile
453 sq. ft.

Phase 2A Excavation
2,507 sq. ft.

Phase 2B Excavation
8,686 sq. ft.

Phase 2A, Excavation Zone 1

Phase 3 Excavation
4,287 sq. ft.

Neuhauser Landfill Site
Erie, Colorado

Excavations and Stockpiles

Geosyntec consultants

Figure 2	4/9/2018
DE0302	DRAFT

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Legend

- Test Pit
- Excavation
- Stockpile

0 25 50
Feet

N

Test Pit F	
Depth (ft)	PPM
7	2
10	20
12	2

Test Pit O	
Depth (ft)	PPM
12.5	3
18.5	9.6

Test Pit Q	
Depth (ft)	PPM
2	547
4	335
6	578
8	335
10	690
13	91

Test Pit G	
Depth (ft)	PPM
11	15,000
13	1,200

Test Pit I	
Depth (ft)	PPM
15	16

Test Pit P	
Depth (ft)	PPM
2	7
4	270
6	27
8	1.8

Test Pit H	
Depth (ft)	PPM
4	bedrock

Test Pit J	
Depth (ft)	PPM
9	2,000
11	1,200
13	150
14	140

Test Pit K	
Depth (ft)	PPM
12	650

Test Pit D	
Depth (ft)	PPM
7	150
9	30
10.5	20

Test Pit E	
Depth (ft)	PPM
9	1

Test Pit C	
Depth (ft)	PPM
8	350
12	350
13	105

Test Pit S	
Depth (ft)	PPM
2	25
5	128
7	518
8.5	212

Test Pit B	
Depth (ft)	PPM
12	750
18	350

Test Pit M	
Depth (ft)	PPM
4	850
8	1,200

Test Pit A/A2	
Depth (ft)	PPM
14	15,000
15	1,510

Test Pit N	
Depth (ft)	PPM
12	450
17	55

Test Pit L	
Depth (ft)	PPM
12	2

Test Pit R	
Depth (ft)	PPM
2	130
5	352
6.5	250
7	296
8.5	240
10	43

Corresponding samples:

NLF-SS-PHASE1-COMP6-011718 (Composite sample of A, B & C)

NLF-SS-PHASE1-COMP7-011718 (Composite sample of J, G & N)

NLF-SS-PHASE1-TPP-012318 (Discrete sample of A as A2)

NLF-SS-PHASE1-NW(02-13)-030618 (Discrete samples collected at depths referenced in the sample numbers from Test Pit Q). Stopped because PID readings below 100 ppm.

NLF-SS-PHASE1-NE(02-8.5)-030618 (Discrete samples collected at depths referenced in the sample numbers from Test Pit S). Bedrock encountered at 8.5' below pit floor in this locaiton.

NLF-SS-PHASE1-SW(02-06)-030618 (Discrete samples collected at depths referenced in the sample numbers from Test Pit P). Stopped because PID readings were well below 100 ppm.

NLF-SS-PHASE1-SE(02-8.5)-030618 (Discrete samples collected at depths referenced in the sample numbers from Test Pit R). Bedrock encountered at 10' below pit floor in this locaiton.

Neuhauser Landfill Site
Erie, Colorado

Test Pit Locations and Results

Geosyntec consultants | Figure 4 | 3/20/2018 | DE0302 | DRAFT

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